

# MARINE SAFETY INFORMATION BULLETIN

MSIB Number : 016-16

TIME: 12:00 PM LCL

Date: October 28, 2016

## **Independent Tank/ Flowback Operations**

**Purpose:** To inform all vessel operators, representatives, and contracting agents operating in the Morgan City Officer in Charge, Marine Inspection (OCMI) AOR on expectations for the carriage of fixed independent tanks for the purpose of conducting flowback operations. This MSIB serves as guidance to ensure a consistent approach to the approval for carriage of fixed independent tanks on the deck of OSV's.

OCMI Morgan City has received a significant increase in interest for vessels to carry fixed independent tanks on deck for the purpose of supporting flowback operations on drilling platforms. Fixed independent tanks present risks and challenges not typically associated with carrying similar cargoes in integral tanks. The following list details the minimum requirements an operator must comply with in order to load and fill fixed independent tanks on their vessel.

- i) **Cargo Review:** All hazardous liquid cargoes to be carried in fixed independent tanks shall be reviewed and approved by COMDT (CG-ENG-5). The Safety Data Sheet (SDS), specific chemical analysis, and the PPR/BLG Product Data Reporting Form for the intended cargo shall be submitted to this office, as well as local OCMI, for awareness and CG-ENG-5 for review and approval. If unsure of the submission process, contact this office and local OCMI for guidance.
- ii) **Fixed Independent Tank Construction:** Fixed independent tank structure and design arrangement must be submitted to U.S. Coast Guard Marine Safety Center (MSC) for approval. Tank design shall be in accordance with section 3.4, titled "Cargo tank construction," within, CG-ENG Policy Letter 03-12, 46 CFR Subchapter F or otherwise provide an equivalent level of safety. The approval letter shall be provided at time of fixed independent tank carriage request.
- iii) **Venting:** The fixed independent tank must be fitted with a suitable venting arrangement (flame screen and pressure vacuum relief valve, or other suitable pressure relief device) as required by cargo. The location of the vent shall comply with the hazardous location requirements as set forth in 46 CFR 111.105 and section 3.6 of CG-ENG Policy Letter 03-12.
- iv) **Nameplate:** The fixed independent tank must have a durable nameplate permanently affixed to the tank structure in an accessible location listing:
  - (1) Manufactures' name, date of manufacture, and serial number;
  - (2) Design pressure in PSIG;
  - (3) Volumetric capacity in gallons;
  - (4) Maximum net weight and maximum gross weight in tons; and
  - (5) Hydrostatic test date.

- v) Stability: The vessel's owner must submit stability calculations to ABS or MSC showing that the vessel stability is adequate for the carriage of cargo within the fixed independent tanks. The calculations must cover all intended tank loading conditions for the route specified on the vessel's COI. The vessel's stability letter must be amended to indicate any limitations on the loading and carriage of fixed independent tanks based on stability considerations. Tank loading configuration shall be in accordance with stability calculations.
- vi) Deck Strength: The vessel's owner shall submit deck strength analysis to ABS or MSC to verify that structural arrangements are adequate for intended fixed independent tank carriage arrangement. Tank configuration shall comply with deck strength calculations.
- vii) Securing Calculations and Arrangements: The fixed independent tanks must have adequate securing devices and be secured to the vessel in accordance with conditions listed on the vessel's stability letter, approved securing calculations, the Cargo Securing Manual (if required), and to the satisfaction of the OCMI.
- viii) Firefighting: Vessel shall comply with the additional firefighting requirement IAW 46 CFR 98.30-37 and 98.30-39 or section 3.9 of CG-ENG Policy Letter 03-12.
- ix) Periodic Testing and Inspection: Fixed independent tanks must be gas-freed for internal inspection and hydrostatically tested at least every 4 years. Tanks must be inspected and tested regardless if it has been used or not within the past 4 years. The master or owner will keep a record of all tank inspection results and make available upon request.
- x) Transfer Procedures: Transfer procedures shall comply with the requirements set forth IAW 33 CFR 156.120. These procedures shall include an approved tankerman PIC IAW with 46 CFR 13.
- xi) Containment: Due to the nature of operations and environmental risks posed, the vessel owner/operator must ensure adequate containment, as required by 33 CFR 155.310, is installed peripherally or at each cargo transfer connection point.
- xii) Other Cargo Calculations: The carriage of all other cargoes, whether in integral tanks or fixed independent tanks, must not exceed a total aggregate volume equal to 20% of the vessel's deadweight tonnage, calculated at a cargoes specific gravity of 1.0.

Once all necessary steps have been completed, please contact the cognizant OCMI to submit a request for inspection.

For questions or comments, please contact the MSU Houma Chief, Inspections Division, LT Joshua Weidman, at 985-850-6411 or the MSU Morgan City Chief, Inspections Division, LCDR Jennifer Hnatow, at 985-380-5353.



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